INDEX TO CONTENTS OF 1990 AMS

VOL. 4 1990

NO.1

Formation Mechanism and Propagation Characteristics of the Equatorial Thermally-Forced Short-Term Climatic Oscillation during the Northern Summer ..... *Ni Yunqi* (倪允琪), *Lin Wuyin* (林武银) and *Li Yuedong* (李曜东) (1)
Forced Rossby Wave Packet Propagation and Teleconnections in the Atmosphere ..... *Yang Huijun* (杨惠君) and *Yang Dasheng* (杨大升) (18)
Adjustment of Wind and Pressure Fields in the Boundary Layer ..... *Xu Yinzi* (徐银梓) and *Wu Rongsheng* (伍荣生) (27)
The Impact of a Diagnostic Cloud Scheme on Forecasts with a Global Atmosphere Model ..... *T.L .Harrt, Zheng Qinglin* (郑庆林) and *W. Bourke* (38)
Numerical Experiment with Processes for Effect of Australian Cold Air Activity on East-Asian Summer Monsoon ..... *He Jinhai* (何金海), *Li Jun* (李 俊) and *Li Yongping* (李永平) (51)
Effect of the Thermal Forcing on the Secondary Circulation of Typhoons ..... *Liu Yuezhen* (刘月贞), *Ding Yihui* (丁一汇) and *Tao Shiyan* (陶诗言) (60)
Statistical Analysis of Cyclone Tracks in Western Antarctic Region ..... *Chen Shanmin* (陈善敏), *Zhang Linyu* (张遴煜) and *Lu Changgui* (逯昌贵) (74)
Numerical Simulation of the Surface Radiation Field in a Hilly Country ..... *Li Zhanqing* (李占清) and *Weng Duming* (翁笃鸣) (81)
The Study on the Wintertime Stratocumulus Clouds over Urümqi, Xinjiang of China——Numerical Modeling of Stratocumulus Clouds ..... *Wang Qian* (王 谦), *Hu Zhijin* (胡志晋) and *You Laiguang* (游来光) (92)
Emissivities of Natural Surfaces and Surface Temperature ..... *Jin Yi'e* (金一鹗) (106)
Seasonal Variation of Lidar-Derived Aerosol Content in the Lower Layers of the Atmosphere ..... *P. Ernest Raj* and *P.C.S. Devara* (113)
Time Series Model of Long-Range Prediction and Its Application ..... *Cao Hongxing* (曹鸿兴), *Wei Fengying* (魏凤英) and *Wang Yongzhong* (王永中) (120)
Some Problems and Treatment in the Regression Analysis of Meteorological Data ..... *Yu Shanxian* (俞善贤) and *Chen Xiaoyuan* (陈孝源) (128)

NO.2

Instability of the Oceanic Waves in the Tropical Region ..... *Ji Zhengang* (季报刚) and *Chao Jiping* (巢纪平) (135)
A Numerical Study for the Effect of Tropical 40—50 Day Oscillation on Asian Summer Monsoon ..... *Ni Yunqi* (倪允琪), *Xu Haiming* (徐海明) and *Meng Xiao* (蒙 晓) (146)
A Dynamical Analysis of Basic Factors of Low-Frequency Oscillation in the Tropical Atmosphere ..... *Xu Xiangde* (徐祥德), *He Jinhai* (何金海) and *Zhu Qiangen* (朱乾根) (157)
Nonlinear Barotropic Instability Including Friction Dissipation,Thermal Driving and Large Topography ..... *Lu Weisong* (陆维松) (168)
Environmental Influences on Northwest Pacific Tropical Cyclone Numbers ..... *Zhang Guangzhi* (张光智), *Wasyl Drosdowsky* and *Neville Nicholls* (180)
Propagation of Internal Inertio-Gravity Wave Spectra in Vertical Wind Shear Environments ..... *Zhang Huijun* (张辉军) and *Lü Daren* (吕达仁) (189)
The Rise Model of Buoyant Plume Limited by Mechanical Turbulence ..... *Li Zongkai* (李宗恺) and *Zhu Xuanxuan* (朱玄玄) (202)
A Three-Dimensional Random Dispersion Model within Surface Layer ..... *Du Shuming* (杜曙明), *Wang Yanchang* (王彦昌) and *Li Zongkai* (李宗恺) (213)
hTe Microphysical Structure of Snow Clouds and the Growth Process of Snow Particles in Winter in Xinjiang ..... *You Laiguang*

(游来光), *Wang Shourong* (王守荣), *Wang Dingfeng* (王鼎丰) and *Chi Yuming* (迟玉明) (221)
Estimation of Vertical Distribution of Relative Humidity Using Satellite Data ..... *P.N. Mahajan* (231)
Theoretical Study of Cold-Air Drainage ..... *Wang Hao* (王 浩) and *Fu Baopu* (傅抱璞) (239)
On Wave Propagation in Non-Uniform Media ..... *Wu Rongsheng* (伍荣生) (248)
Projection Pursuit Principal Component Analysis and Its Application to Meteorology .....
..... *Chang Hong* (常 红), *Shi Jiu'en* (史久恩) and *Chen Zhonglian* (陈忠廉) (254)

NO. 3

CH_4 Emission from a Chinese Rice Paddy Field ..... *Wang Mingxing* (王明星) *et al.* (265)
Simplification of the Oxygen-Absorption Coefficient Formula in Microwave Band .....
..... *Zhao Bolin* (赵柏林), *Liu Wen* (刘 雯) and *Tang Chengxian* (唐承贤) (276)
The Absorption of Solar Radiation by Aerosol Atmosphere .....
..... *Yin Hong* (尹 宏) and *Han Zhigang* (韩志刚) (287)
Reconstructing Middle-Tibet Climate during the Last 600 Years by Dendroclimatological Method.....
..... *Wu Dingxiang* (吴定祥), *Zhan Xuzhi* (湛绪志), *Sun Li* (孙 力) and *Cheng Zhigang* (程志刚) (294)
A Numerical Study of Short-Range Climatic Oscillation with Various Time Scales Forced by El Nino during the Northern Summer ..... *Ni Yunqi* (倪允琪) and *Lin Wuyin* (林武银) (305)
Effects of Orography and Horizontal Diffusion on the Generation of the Asymmetric Motion in the Barotropic Filtered Model Atmosphere ..... *Liao Dongxian* (廖洞贤) and *Yu Haian* (余海安) (325)
Error Growth in Numerical Prediction and Atmospheric Predictability .....
..... *Chen Minghang* (陈明行) and *Ji Liren* (纪立人) (334)
Effects of Three-Dimensional Structure of Heating Field on the Summer Monsoon Circulation in Asia
..... *Lin Benda* (林本达) and *Zhang Jinsong* (张劲松) (343)
Effect of Local Basic Flow Structure Pattern in Formation of Blocking Highs..... *Luo Zhexian* (罗哲贤) (354)
A Diagnostic Study of an Explosively Deepening Oceanic Cyclone over the Northwest Pacific .....
..... *Li Changqing* (李长青) and *Ding Yihui* (丁一汇) (361)
Semi-Lagrangian Advective Schemes and Their Nonlinear Computational Chaos.....
..... *Yang Shuowen* (杨硕文), *Zhou Xiuji* (周秀骥) and *Yang Peicai* (杨培才) (373)
On the Weather-Yield Simulation and Models in China ..... *Wang Futang* (王馥棠) (381)
About New Members of Our Editorial Committee..... (392)

NO. 4

Memorial Issue for Centenary Birthday of Zhu Kezhen

Contributions of Prof. Zhu Kezhen to the Development of Meteorology in China——in Memory of His Centenary Birthday ..... *Tao Shiyan* (陶诗言) (395)
A Review of the Atmospheric General Circulation and Monsoon in East Asia.....
..... *Zhu Baozhen* (朱抱真), *Ding Yihui* (丁一汇) and *Luo Huibang* (罗会邦) (399)
Progress of Numerical Weather Prediction in China in the Past Decade ..... *Liao Dongxian* (廖洞贤) (417)
Seasonal and Annual Temperature Variations Since 1470 AD in East China .....
..... *Wang Shaowu* (王绍武) and *Wang Risheng* (王日昇) (428)
Spatial and Temporal Variations of the Kinematic Characteristics in the Propagation of Atmospheric Stationary Waves ..... *Wu Guoxiong* (吴国雄), *Chen Biao* (陈 彪) and *Wu Zhengxian* (吴正贤) (440)
Effects of Boundary Layer Friction and Topography on the Instability of Baroclinic Waves.....
..... *Zhao Ming* (赵 鸣) (453)
Change of Climate and Its Influence on the Cropping System in China .....
.....*Chen Longxun* (陈隆勋), *Gao Suhua* (高素华), *Zhao Zongci* (赵宗慈), *Ren Zhenhai* (任阵海) and *Tian Guangsheng* (田广生) (464)
Modeling and Prediction Concerning Time Series of Flood/Drought Runs Using the Self-Exciting Threshold Autoregressive Model ..... *Li Cuihua* (李翠华) and *Yao Zhensheng* (么枕生) (475)
The Diffusion Parameter and Heat-Release Rate of Plumes caused by the 1987 Forest Fire in Northeast China ..... *Xu Dahai* (徐大海) (484)
A 2 m^3 Isothermal Cloud Chamber for the Study of Artificial Ice Nuclei .....
Feng Daxiong (冯大雄), *Wang Yunqing* (王云卿), *Chen Ruzhen* (陈汝珍) and *Jiang Gengwang* (蒋耿旺) (494)
A Three-Dimensional Cloud-Scale Model Suitable for Compressible Atmosphere .....

..... *Xu Huanbin* (许焕斌) and *Wang Siwei* (王思微) (503)
Solar Radiation at Ground in East-Asia from Data of the Geostationary Satellite GMS.....
..... *Fang Xianjin* (方先金) and *Ehrhard Raschke* (513)

NO. 5

Special Issue on Tropical Circulation & LFO

Preface ..... *Tao Shiyan* (陶诗言)
A further Inquiry on 30—60 Day Oscillation in the Tropical Atmosphere .....
..... *Li Chongyin* (李崇银) and *Wu Peili* (武培立) (525)
Meridional Propagation of East Asian Low-Frequency Mode and Midlatitude Low-Frequency Waves
..... *He Jinhai* (何金海) and *Yang Song* (杨 松) (536)
Low-Frequency Summer Monsoon in Indonesia-Northern Australia and Its Relation to Circulations in Both Hemispheres ..... *Zhu Qiangen* (朱乾根), *Zhi Xiefei* (智协飞) and *Lei Zhaochong* (雷兆崇) (545)
Numerical Study of the Short-Term Climatic Oscillation Forced by El Nino During Northern Winter
..... *Ni Yunqi* (倪允琪), *Lin Wuyin* (林武银) and *Ning Dongmei* (宁冬梅) (554)
Eastward Movement of Midlatitude Low Frequency Waves and Their Interaction with System Downstream
..... *Luo Zhexian* (罗哲贤) (569)
A Baroclinic Semi-Geostrophic Model Using the Wave-CISK Theory and Low-Frequency Oscillation
..... *Liu Shikuo* (刘式适) and *Wang Jiyong* (王继勇) (576)
Interannual Low-Frequency Oscillations of Meridional Winds over the Equatorial Indian-Pacific Oceans
..... *Lü Jingxi* (吕竞夕), *Ding Yihui* (丁一汇) and *Gao Shiying* (高士英) (586)
The Interannual Oscillation of Rainfall over China and Its Relation to the Interannual Oscillation of the Air-Sea System .....
Chen Longxun (陈隆勋), *Chen Duo* (陈 多), *Shen Rugui* (沈如桂) and *Zhang Qingfen* (张清芬) (598)
A Numerical Study on the Interannual Time-Scale Low-Frequency Oscillation ....*Ma Jingxian* (马镜娴) (613)
Theoretical Study on Effect of Qinghai-Xizang Plateau upon Cold Surge .....
..... *Lu Weisong* (陆维松) and *Zhu Qiangen* (朱乾根) (620)
Interaction between Waves in Low-Latitude Atmosphere and Tropical Low-Frequency Oscillation....
..... *Yang Yan* (杨 燕) and *Zhu Baozhen* (朱抱真) (629)
Effect of Planetary and Synoptic Scale Waves in Maintaining Meridional Circulations at Mid and Low Latitudes..... *Chen Biao* (陈 彪), *He Jinhai* (何金海) and *Pu Jiguang* (蒲吉光) (640)
Comparison of Linear and Nonlinear Waves Associated with Steady-State Forcing Sources .....
..... *Lei Zhaochong* (雷兆崇) and *C.N. Duncan* (650)
Index to Contents of 1990 AMS ..... (661)